

August 9, 2005



Ms. Katherine Benham  
USDA-AMS-TMD-NOP  
1400 Independence Avenue, SW.  
Room 4008–South Building  
Ag Stop 0268  
Washington, DC 20250–0200

Dear Ms. Benham:

OMRI appreciates the opportunity to comment to the NOSB. We have five specific areas where we wish to comment: (1) Sunset provisions; (2) Clarification of the meaning of synthetic; (3) Manure, Compost and compost tea; (4) Research variance; (5) Heavy metals; and (6) Commercial availability of seed. The NOSB also called for comments on the classification of substances as agricultural or non-agricultural, but OMRI is not prepared to offer comments on this urgent issue at present.

Sunset

OMRI understands the need to re-evaluate all substances that appear on the National List. Technologies change, inventions are introduced, and new risks are discovered. OMRI does not support or oppose either the removal or the continued listing of any substance on the National List. We will report whatever the outcome to our subscribers and will continue to publish a *Generic Materials List* that fully complies with the NOP. Our comments in response to the Advanced Notice of Proposed Rulemaking are procedural in nature.

The process requires more time and public notification. We hope that the NOP will consider granting an extension. We understand that 2007 will be here shortly, but also believe that the re-review process should be thorough and provide adequate public notification. As a matter of public record, OMRI notes that several items on the National List were not reviewed by the Technical Advisory Panel (TAP). These include vitamins and minerals on 7 CFR 205.603 and 7 CFR 205.605(a), natural flavors on 7 CFR 205.605(a), and natural colors on 205.605(a). While the NOSB recommended that vitamins, minerals, and flavors be added to the National List, the NOSB never recommended natural colors be added to the National List.

OMRI also notes that the NOSB recommended an accelerated sunset on a number of items. These items were recommended to be added to the National List with the understanding that they would be re-reviewed ahead of the sunset period schedule. Among those included are antibiotics used for disease control in crop production (November 1995) and chlorine products used for crops, livestock, and processing (November 1995).

The NOSB also called for re-review of nutrient supplementation of organic food (NOSB recommendation 13, October 31, 1995), natural flavors used in processing (NOSB recommendation 14, October 31, 1995), and vitamins and minerals used in livestock production (NOSB Recommendation Addendum 18, October 31, 1995). In particular, Recommendation Addendum 18 makes explicit mention of that the TAP review was deferred, with the policy to be re-evaluated within 2 years. While the NOSB re-examined the policy in 2002, many questions remain with certifiers, suppliers, and livestock producers. A case-by-case review of vitamins and minerals is needed to explore how many have organic and non-synthetic sources available as alternatives, and to determine which vitamins presumed to be synthetic in 1995 are now, ten years later, produced by excluded methods.



Natural colors were not reviewed by the TAP and were not recommended by the NOSB. OMRI is not aware of any standard of identity for natural colors. A number of colors may be obtained from natural sources that could be considered agricultural—such as beets, carrots, and annatto. As such, they appear to be subject to 205.105(d) and 205.606 rather than 205.605(a). A review of these substances and clarification of what is agricultural will help to bring clarity if natural colors remain on the National List and if so, in which section.

OMRI also urges the NOP and NOSB to consider the revision of annotations to be a valid subject of the sunset clause, without resorting to the cumbersome procedure of removing an item and requiring a new petition. In particular, OMRI requests that the NOSB reconsider the annotations for (a) aquatic plant products (7 CFR 205.601(j)(1)), (b) fish products (7 CFR 205.601), and (c) humic acid derivatives (7 CFR 205.601(j)). The annotations are all ambiguous and are difficult to implement. OMRI has established guidelines for the humic acid derivative products that it will list (see Appendix B). The annotations that limit the use of a listed material are often crucial to ensure that the criteria of OFPA to protect the environment and maintain the integrity of the product when the National List makes an exception for the use of a particular synthetic material.

#### Synthetic

OMRI strongly supports the clarification of synthetic and thinks that the NOSB's materials and processing committees did a superb job. We offer some additional points for discussion, and urge the entire NOSB to adopt the clarifications at this meeting so that we can use those clarifications in conducting our work. OMRI has prepared a paper to supplement the guidance and to illustrate some of the issues that we face in our daily work of reviewing specific products for their compliance with the NOP Rule. OMRI asks that the NOSB consider three various applications of their guidance: extraction; side-reactions; and crystallization.

Plants and animals may be chemically changed by something other than the extraction reaction, or may be structurally changed and not undergo any kind of chemical change. For example, aquatic plants can be prepared for use as foliar fertilizer by being dried and crushed, frozen and macerated, or hydrolyzed with synthetic acids or alkalis. These products often are referred to as "extracts" even though they do not meet the definition of extraction presented in the NOSB Recommendation. The clarification will help to better understand what is 'extraction' and therefore permitted, and what is not extraction but a different kind of chemical change with the technical effect of increasing the fertilizer value, or 'fortification,' and therefore prohibited.

Blending two allowed materials may cause a reaction that yields a different substance that may be prohibited. OMRI supports the clarification that it offers to understand that those substances that appear on the National List with annotations do not imply that any product formulated with those substances is permitted. These side reactions can be used as a loophole to introduce new substances not reviewed or intended to be allowed by the NOSB's recommendation. Application of the guidance will help maintain that clarity.

Finally, various products of salty water can be crystallized by a number of methods. The guidance will help to determine what products of crystallization are synthetic and which are naturally crystallized.

#### Manure, Compost, and Compost Tea

OMRI supports the recognition of other compost techniques as equivalent to those currently found in the regulation. We think that the Compost Task Force recommendations that the NOSB already adopted as their own recommendations in May 2002 should be considered only as reference and should not be debated or voted on at this meeting. The USDA has informed the public, including members of Congress, that it is implementing this recommendation and reconsideration at this point could only confuse matters.

OMRI recognizes that the other issues faced regarding manure management are more difficult to resolve. Regarding methods of pathogen reduction other than composting, OMRI reviewed the literature and products

reviewed by our Brand Name Review Program. The results of the study are on our website. OMRI asks that the NOSB recommend and the NOP adopt the following:

1. OMRI urges the NOSB and NOP to replace the term ‘processed manure’ with ‘dehydrated manure.’ The Association of American Plant Food Control Officials does not have an official term defining processed manure. As a term in the trade, ‘processed manure’ may include treatments with various synthetic chemicals and irradiation as well as thermal treatment and reduction of moisture.
2. Expand the acceptable criteria for dehydrated manure products to accept specific treatments that are shown by routine testing for indicator pathogens to be as effective as composting.
3. Dehydrated manure products are not sufficient for an organic soil building program because the carbon level is lower and the nutrients are more volatile and soluble than compost. Such products also have lower biological activity than compost. Therefore, dehydrated manure should only be permitted as part of a soil building program and not as the only soil amendment and practice.
4. The time and temperature requirements should reflect those provided in the US EPA 503 Rule, allowing a reduction in the time of treatment relative to the temperature.
5. Pelletization should be studied further as a potentially valid process for further reducing pathogens.

The compost tea recommendations are problematic. OMRI understands that the Final Rule does not address compost tea, and has moved all OMRI-listed compost tea products into ‘Unresolved’ status until there is clarity. Pathogen reduction and a precautionary approach is important, but the NOSB and NOP should take into consideration that compost tea has been used safely in organic farming for hundreds of years, and that application of compost tea is a long-standing tradition. Only recently has the practice been subject to academic research. The Compost Tea Task Force (CTTF) makes several recommendations that do not appear to be warranted. Because the companies that make compost tea built their businesses around the growth of the organic sector, these companies have been hard hit by the change in status and subsequent loss of good faith from their customers. They understand that the reassignment was not OMRI’s decision and hope that the matter can be resolved.

OMRI acknowledges that water could be a potential source of pathogens. However, the requirement of potable water does not appear to address the main concern, and might possibly be counterproductive to the purposes conserving water, preventing pollution, and protecting habitat. Sources that are known to be high in human pathogens, e.g. water reclaimed from sewage treatment plants, may need to be excluded. However, some sources of non-potable water could be safely used to make compost tea and field applied rather than discharged.

The use of sanitizers also appears to be counter to their intended purpose and the state of the art. Equipment is not necessarily greater source of pathogens than the feedstocks. The NOSB is reminded that sanitizers are toxic chemicals and usually are registered as pesticides with the EPA. While chlorine bleach and hydrogen peroxide are on the National List, other sanitizers are not. While it is legitimate to consider them production aids, they would need to be petitioned and reviewed on a case-by-case basis. The NOSB also should be aware that disinfected equipment will immediately come in contact with feedstock high in microorganisms. Not only is the effectiveness of sanitizing compost tea equipment unproven, it is likely to be counterproductive. Disinfection jeopardizes the health of the beneficial microorganisms that give compost tea its most desirable properties. Currently, we are unaware of any compost tea producer who uses sanitizers on their equipment.

It is OMRI’s experience that compost teas that fulfill the thermophilic requirements for compost effectively reduces pathogens to a comparable level. Testing for indicator pathogens takes sufficient precautions to protect public health while ensuring a compost tea that has the desired biological activity.

OMRI is also concerned about the ‘name game’ being played. There are several liquid fertilizer products that have additives and inoculants that have chosen to not call themselves ‘compost tea.’ Some use a thermophilic process to transform their feedstock and are essentially making compost tea. Products that are made the same way and have the same ingredients should be treated the same, regardless of what they are called.

OMRI would like to see additional experts on vermicompost consulted before the NOSB votes on the vermicomposting recommendations.

#### Research Variance

OMRI supports the adoption of the suggested revisions submitted by the Organic Farming Research Foundation to the guidance document on research variances granted under 7 CFR 205.290. In particular, we concur that there can be no variances for the application of prohibited materials, regardless of whether the products are marketed as organic. That section of the NOP Rule permits the practice standards for production and handling to be granted variances, prohibited substances are still prohibited substances and should not be used on organic farms. Certifiers should discourage studies that compare organic farming with techniques that use prohibited substances should be discouraged. Researchers who work in organic farming systems need to focus on efforts to improve organic techniques. We also think that the criteria used to grant variances should emphasize the temporary and exceptional nature of variances. Researchers should not be expected to become routine, *de facto* modifications of the regulation.

#### Heavy Metals

The organic community faces the challenge of defining and adopting standards for heavy metal contaminants in soil amendments. The National Organic Program standards require that “[t]he producer must manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, *heavy metals*, or residues of prohibited substances.” (7 CFR 205.203(c), emphasis added). The National List further prohibits natural sources of arsenic (7 CFR 205.602(b)) and lead salts (7 CFR 205.602(d)). Thus the NOP generally and specifically prohibits the application of certain heavy metals. In OMRI’s opinion the current NOP rule also prohibits fertilizers that elevate other toxic contaminants, such as cadmium and mercury even though these elemental contaminants do not appear on the prohibited non-synthetic list.

OMRI would like to work with the NOSB and the NOP to develop guidelines for producers, suppliers, and certifiers to use to determine thresholds for unavoidable residual environmental contamination of organically managed land, the levels in prohibited in fertilizers and soil amendments that are applied to organic farms, and the procedures used to monitor such contamination.

#### Commercial Availability of Seed

Finally, OMRI again offers to help with the management of data to help determine what sources of organic seed are commercially available. We currently have a list of organic seed sources, and are working with seed companies that are on the American Seed Trade Association’s organic committee to develop a procedure for certifiers to determine the commercial availability of seed.

Please let us know if we can be of any further assistance.

Regards,



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Research Director